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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,911	08/22/2003	Yuzo Higashiyama	P/1071-1600	1595

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EXAMINER

EDMONDSON, LYNNE RENEE

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 02/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/646,911

Applicant(s)

HIGASHIYAMA, YUZO

Examiner

Lynne Edmondson

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,3-6 and 8 is/are rejected.  
7) ☒ Claim(s) 2,7 and 9-11 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 25 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. The indicated allowability of claims 3 and 4 is withdrawn in view of the newly discovered reference(s) to pressing during vibration and controlling distances.

Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 3-5 are rejected under 35 U.S.C. 102(a) as being anticipated by Nomura et al. (USPN 6357506 B1).

Nomura teaches an ultrasonic bonding method comprising the steps of clamping a material such that the clamp (13a, 22a) vibrates synchronously with the vibration member and pressing the material against the bonding surface (figures 2 and 7 and col 4 line 28 – col 5 line 42).

4. Claims 1, 6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Akiyama et al. (USPN 6273980 B1).

Akiyama teaches an ultrasonic bonding method comprising the steps of clamping a material such that the clamp vibrates synchronously with the vibration member and pressing the material against the bonding surface (col 3 lines 33-60 and col 3 lines 20-32).

5. Claims 1, 5 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Gratz et al. (USPN 6517652 B1).

Gratz teaches an ultrasonic bonding method comprising the steps of clamping a material such that the clamp vibrates synchronously with the vibration member and pressing the material against the bonding surface (col 6 line 15 – col 7 line 5).

### ***Response to Arguments***

6. Regarding applicant's argument that Akiyama does not teach clamping in the direction of ultrasonic vibration see figures 1 and 2 which show (with dashed lines) a seating area for the lenses which holds them on all sides by seating them at least partially within the holders (col 1 lines 31-47, col 2 lines 1-12 and col 3 lines 5-54).

7. Therefore the 102 rejection of claims 1, 6 and 8 as anticipated by Akiyama stands.

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8. Regarding applicant's argument that Gratz does not teach clamping in the direction of ultrasonic vibration see figure 2 which shows vibrating plate 5 and clamping plate 6 which are opposite abutment plate 7 (col 6 lines 15-43). As clamping plate 5 is also a vibration plate, the vibration would be synchronous.

9. Therefore the 102 rejection of claims 1, 5 and 6 as anticipated by Akiyama stands.

***Allowable Subject Matter***

10. Claims 2, 7 and 9-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: The closest prior art teaches the invention essentially as claimed but does not teach urging the clamp at a node or does not use a predetermined, controlled load or position control (Akiyama, USPN 6273980 B1). Neither is the particular horn shape disclosed.

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**Conclusion**

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ogino et al. (USPN 5651494), Belcher et al. (USPN 5460320, side and vertical holding) and Higashiyama (US 2003/0160084 A1).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynne Edmondson whose telephone number is (571) 272-1172. The examiner can normally be reached on Monday through Thursday from 6:30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lynne Edmondson  
Primary Examiner  
Art Unit 1725

LRE

LYNNE R. EDMONDSON  
PRIMARY EXAMINER

2/12/05